Clark County Concurrency Summary Report

Prepared for

Clark County, Washington

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Executive Summary

Clark County, Washington, received a grant from the Federal Highway Administration to evaluate its *transportation concurrency policies.* "Concurrency" is a requirement of the State of Washington's Growth Management Act. Concurrency means that certain key public facilities must be provided at the same time (concurrently) with new growth. As applied to transportation in Washington, concurrency means that a city or county must ensure new development is accompanied by transportation facilities or programs that maintain some standard of service even as traffic increases.

To address the County's questions about concurrency, this project conducted a range of research, including a literature review on concurrency policies in Washington and elsewhere, and a study of baseline transportation and land use data in Clark County. This research identified twelve main aspects of concurrency policy that this studied evaluated in more detail:

- Concurrency test area
- Corridor speed and intersection delay standards
- Modeling for background traffic shifts
- Through traffic
- Time available to achieve concurrency
- Constrained facilities
- Mitigation strategies
- Fees for concurrency
- Modes of travel
- Multi-modal concurrency
- Allocation of capacity
- Investment priorities

The study combined variations on these policy components into policy packages that related to four potential development goals for Clark County: stop or slow growth, shape growth, accommodate growth, or stimulate growth.

The several conclusions on transportation concurrency that are applicable not only to Clark County but to any jurisdiction implementing transportation concurrency policy. Only the last conclusion on legality is Washington-specific:

1. In most cases, the current level of transportation service cannot be maintained in all parts of a growing urban area over the long run.

2. Concurrency should be a means of achieving goals for growth and development, not an end in itself.

3. Concurrency can be adjusted to achieve different goals for transportation, land use, and economic development.

4. Transportation concurrency policies can affect growth. Level-of-service standards are variable; they can be set low to accommodate growth, or set high to shape it.

5. Concurrency's impacts on growth in the short run may be different in the long run.

6. Timing matters. Level-of-service standards developed from analysis of a twenty-year plan are not achievable with a six-year TIP and three-year concurrency evaluations.

7. Concurrency requires establishing thresholds, with the result that some properties close to one another will be treated differently.

8. Concurrency policy (maintaining level of service on corridors) may conflict with the necessity of providing safe access to the corridors.

9. Local concurrency policies have little control over two factors that have a big impact on their roads: state highways and through traffic.

10. All of the possible changes to concurrency policy described in this report are probably legal in Washington.

These conclusions are documented in detail in a Summary Report, and in several hundred pages of appendices, all of which are available from Clark County.

Chapter 1

Introduction

BACKGROUND

WHY THIS PROJECT

Clark County, Washington, received a grant from the Federal Highway Administration to evaluate its *transportation concurrency policies.* "Concurrency" is a requirement of the State of Washington's Growth Management Act. Concurrency means that certain key public facilities must be provided at the same time (concurrently) with new growth. As applied to transportation in Washington, concurrency means that a city or county must ensure new development is accompanied by transportation facilities or programs that maintain some standard of service even as traffic increases. Chapter 2 provides more detail.

In a narrow sense, this project is about determining how to implement state concurrency requirements for transportation in Clark County. The desired outcome is that the transportation system maintain reasonable levels of service even as growth of population, employment, and development continues in Clark County, and that such a result be achieved in ways consistent with the requirements of the state Growth Management Act (GMA). More specifically, Clark County needed a study that would help it achieve a better match between the short-term, development-review-based testing of transportation system performance and the long-term, comprehensive-plan-based testing of transportation system performance.

As the project team moved from the general language of the 1999 grant application to the reality of planning problems facing the County 2002, the need for integrating the evaluation of concurrency into a broader evaluation of land use, public facilities, and the comprehensive plan became even more apparent. In September 2000 the County Board of Commissioners adopted a lower level of service for speed and travel times on 34 traffic corridors in the unincorporated County, mostly in the southern County. The County acknowledged that it did not have the money to fund the adopted 20-year Comprehensive Framework Plan for transportation: by changing how concurrency got measured, it essentially created more development capacity without any additional transportation capacity. There was some discussion about whether the County could grow its way out of its concurrency problems by expanding Urban Growth Areas, thereby taking traffic pressure off the hardest hit areas. That potential solution, however, would be at odds with several other requirements of GMA and policies of the County and cities.

For these reasons, the County and the consultant team decided that this study had to recognize concurrency policy's larger role. Though the focus of the study is concurrency, the reason to study concurrency—to get

concurrency policies right—is to ensure a balance between population and employment growth, land development, and transportation capacity that allows the residents of the County to enjoy the benefits of economic growth without suffering too greatly from its negative consequences.

PROJECT PHASES

This project had three phases:

- **Phase I** (completed in April 2001) got the project organized, collected base data, conducted a literature review, and got agreement on the evaluation methods to be used in the subsequent phases.

- **Phase II** (completed in November 2001) provided baseline information for the analysis of concurrency alternatives. It evaluated Clark County's development, characteristics and performance of the transportation network, and concurrency methods and outcomes from 1995 through 2000. The Phase II report also identified initial policy alternatives for further study.

- **Phase III** (completed in May 2002) conducted the bulk of the evaluation. It defined baseline conditions and then evaluated nine narrow and three broad policy options, with the help of transportation modeling. It illustrated potential policy packages that could meet the County's transportation and development goals.

METHODS

The project team employed a variety of methods throughout this project, which included:

A. **Literature review.** Phase I included an extensive literature review (including some interviews with other jurisdictions implementing transportation concurrency) that revealed the different issues involved in transportation concurrency, both in Washington and elsewhere in the U.S. Phase III included a more focused literature review that looked at how other jurisdictions in the U.S. have dealt with specific policy options we were evaluating.

B. **Data analysis.** In Phase II the consultants analyzed data in spreadsheets, GIS, and transportation models on the past and current development and transportation patterns in the County.

C. **Transportation modeling.** Consultants modeled the transportation effects of every policy that required and allowed such a model to be run. The policy variables were inputs to the model, and the outputs were data on the level of service (corridor travel speeds) within the transportation system. Consultants linked the regional EMME/2 model to the County's day-to-day concurrency program model (Traffix), using a 1999 traffic volume base.

D. **Interviews.** Almost 30 interviews were conducted in person or over the phone in Phase I. The interviews identified issues surrounding concurrency in Clark County and provided information to stakeholders about the purpose of the study. Phase III had second round of interviews, following our completion of the draft Phase III report and prior to the completion of this summary report. This second round of interviews was a final check-in with stakeholders.

E. **Public review process.** In addition to the interviews, which served an information-gathering as well as a public involvement process, staff and consultants had meetings with the Clark County Board of Commissioners, and with an Advisory Committee composed of City, County, and FHWA staff, as well as representatives of Friends of Clark County and the Clark County Homebuilders.

ORGANIZATION

The rest of this report is organized as follows:

F. **Chapter 2, Overview of Concurrency,** describes what concurrency is, why it was established, and how it has been used for transportation and other public facilities. This chapter also illustrates the general components of a transportation concurrency policy.

G. **Chapter 3, Context for the Clark County Evaluation,** provides information on recent and current growth and development in Clark County, including population and employment trends, current land use and recent building activity, and key transportation policies, improvements, and system performance. It describes corridors selected as case studies.

H. **Chapter 4, Policy Evaluation,** highlights the findings of the evaluation of nine narrow and three broad policy alternatives. It presents conclusions about transportation concurrency in general, and presents policy packages that could potentially meet the County's transportation and land use goals.

This summary report also has several appendices, consisting of the reports for each of the three phases of the project, plus their appendices. These reports and their appendices are listed in the table of contents.

Chapter 2 What is Transportation Concurrency?

OVERVIEW

"Concurrency" is a requirement of Washington's Growth Management Act (GMA), which was passed in 1990. In general, concurrency means that certain key public facilities must be provided at the same time (concurrently) with new growth.

As applied to transportation in Washington, concurrency means that a city or county must ensure new development is accompanied by transportation facilities or programs that maintain some standard of service even as traffic increases. In practice, a city or county evaluate the traffic impacts of each proposed new development: if the impacts are not expected to cause the standards to be violated, or if the new development agrees to build new facilities, or contribute to new facilities that will be built within a reasonable period of time (usually three to six years), then a permit allowing the development is granted. If impacts are expected to violate the standard, then a permit may be denied; in the extreme, a moratoria on development in part or all of a jurisdiction may occur until facilities are built or standards lowered.

The exact text of the Washington statute related to concurrency (RCW 36.70A.070(6)(b)) follows:

> *"After adoption of the comprehensive plan by jurisdictions required to plan or who choose to plan under RCW 36.70A.040, local jurisdictions must adopt and enforce ordinances which prohibit development approval if the development causes the level of service on a locally owned transportation facility to decline below the standards adopted in the transportation element of the comprehensive plan, unless transportation improvements or strategies to accommodate the impacts of development are made concurrent with the development. These strategies may include increased public transportation service, ride sharing programs, demand management, and other transportation systems management strategies. For the purposes of this subsection (6) "concurrent with the development" shall mean that improvements or strategies are in place at the time of development, or that a financial commitment is in place to complete the improvements or strategies within six years."*

Before the Growth Management Act was adopted, Washington law included requirements to address the adequacy of certain public facilities. The subdivision approval process (see RCW 58.17.110) requires local governments to make written findings of appropriate provision of a long list

of public facilities, including streets, roads, alleys, other public ways, and transit. In addition, the State Environmental Policy Act has been used to test the impacts of development on the "built environment" (typically public infrastructure, including roads and other facilities).

Concurrency was included in the GMA because Washington was facing rapid growth that was outstripping transportation capacity, and existing laws were seen as inadequate. Legislators did not want to see transportation systems deteriorate to unacceptable conditions or economic growth choked by congestion. Since overall growth control was not the intent, a blanket growth control measure like capping building permits was not seen as a solution. Instead, concurrency was chosen as a way to guide development to where the transportation system was adequate, and to provide an incentive for improving the transportation system in areas where local governments wanted new growth to go, but which were not prepared for the growth.

Other states have implemented concurrency for either transportation or a broader range of public facilities. In 1972, a New York court held in *Ramapo* that governments can use timing and sequencing of infrastructure as a tool to regulate growth. In 1978, Maryland authorized (but did not require) local governments to adopt ordinances requiring "adequate public facilities" as a condition of development, and 12 counties now have such ordinances. Florida adopted a statewide growth management law in 1985 that requires all local governments to adopt and implement concurrency requirements for roads, sewers, parks, schools, and other public services.

The concurrency requirement is about balancing public investments and private development. Washington's transportation concurrency requirement requires Clark County to keep three things in balance: development, transportation system capacity, and the level of service of the transportation system. In theory, Clark County can adjust any of these three factors to achieve balance with the other two. In reality, the County is limited in how much it can change each factor:

I. **Development.** The County could slow development to preserve a level of service with a set amount of transportation system capacity. However, the State prescribes ranges of population that a local jurisdiction must plan to accommodate; existing development affects demand for new development; and market forces affect the location, density, and type of new development.

J. **Transportation system capacity.** The County could construct or require construction of additional transportation system capacity to accommodate new development at a given level of service. However, established neighborhoods often resist increased traffic in their areas, environmentally sensitive lands need to be protected, and government has limited resources to pay for additional roads, transit, bicycle and pedestrian facilities.

- **Levels of service.** The County could lower the level of service in order to accommodate new development with the existing transportation system. As congestion increases, however, businesses and residents are affected by the slower flow of goods, services, and customers; constituents therefore become dissatisfied and try to solve the problem themselves. Examples include Referendum 49 in 1998 to increase transportation investment, and Initiative 745 in 2000, which would have required 90% of transportation revenues to be spent on roads, not transit or other modes.

COMPONENTS OF A TRANSPORTATION CONCURRENCY POLICY

Balancing these factors within a concurrency policy is clearly a complicated task. It requires an understanding of the policy "levers" that can assist in getting the balance right. A transportation concurrency policy has many components, each of which could be considered a potential factor for alteration. The following components are the main ones the project team identified.

K. **Aspects of transportation.** A transportation system consists of vehicles and facilities (e.g., roads). With respect to vehicles, a concurrency policy could consider standards for not only autos and trucks, but also public transportation, bicycles, and pedestrians. With respect to facilities, a policy could consider standards for not only highways and other roads, but also sidewalks, bike lanes, high-occupancy vehicle facilities, and public transit facilities.

L. **Level of service (LOS) standards.** LOS standards have several sub-components. One is whether standards are based on capacity (e.g., how many lanes must exist for a certain level of usage) or on service (e.g. a maximum allowable delay at intersections). This can also be seen as the tradeoff between requiring a means of traffic reduction versus requiring an end result that must be met. Another sub-component is whether standards exist for intersections or for the flow of traffic along corridors. Whether LOS standards are to be met at individual points of measurement (e.g. at every intersection) or on average at all points of measurement is another policy sub-component. Finally, the stringency of the standards themselves (high or low; restrictive or permissive) is obviously important.

M. **Geographic area.** Defining the area of impact from a development is an important policy component. Distances could be based on a uniform area around a development (such as a one-mile radius) or on the shape of the traffic-shed. The distance could also be varied based on the amount of traffic generated, the type of development, or the location of development. Another important geographic policy component is whether concurrency would be based on a uniform countywide policy, or distinct policies and standards for different sub-areas.

N. **Time period.** Any transportation improvements necessary to serve new development must be completed within a certain amount of time

after a development is constructed. This time could range from zero (that is, the improvements must be in place before construction of the development beings) to up to six years (the general GMA maximum time period).

O. **Mitigation approach.** This policy component deals with what processes are available to allow developers to "buy" their way out of a concurrency denial. Government could allow developers to construct any improvement that resolves the deficiency, it could require an improvement from an approved 6-year or 20-year improvement program, could allow the use of "alternative modes" to mitigate impacts, or could allow no mitigation whatsoever.

P. **Process.** Testing for concurrency requires that a local government have some method for estimating the effects of a new development on level of service. That estimate may based on traffic modeling that includes an analysis of trip generation, modal split, and trip patterns. Traffic modeling can differ in the extent to which it considers factors like the amount of through traffic and background traffic shifts. Another subcomponent to process is whether capacity can be reserved for priority areas and industries, or whether capacity is allocated on a first-come, first-served basis. Related to this, exemptions could be given or lower standards applied to desired development types or certain areas within the jurisdiction. Finally, a process subcomponent is whether evaluation for concurrency occurs case-by-case, or periodically for a all properties in a subarea.

Q. **Other components.** There are undoubtedly other policy components that could be important to the transportation system and land use. One is whether fees are charged for concurrency review. Another is the extent to which concurrency policy and modeling is coordinated with other departments and jurisdictions. The issue of modeling through traffic from neighboring jurisdictions is one that could be coordinated with neighboring jurisdictions.

A jurisdiction has a choice about which and how many of these components of an overall program for transportation concurrency it chooses to address. A *narrow approach* would consider standard policy components that focus on effects on the transportation system, such as level of service (LOS) or the time period for providing transportation improvements. A *broad approach* would include components that have a direct effect on broader areas of concern, like land use, the environment, economic development, and government's fiscal capacity to provide other services. Such components include those related to the type of vehicles considered, and the possibility of exemption or capacity allocation for targeted uses or areas of the County.

As part of Phase I, the consultants and County staff concluded that it would be best to begin with a *narrow* interpretation of the scope of the study. The alternatives would, at least initially, focus on small changes to the existing County policy for transportation concurrency––for example, changes

in the LOS standards.[1] Existing transportation models would be used, and land use patterns outlined in the Comprehensive Plan (and its update, now in process) would be taken as a starting point. The reason for this narrow interpretation is that this study is primarily about transportation concurrency, not about growth management and comprehensive planning.

But this study also considers a broader view. It could not ignore the fact that transportation concurrency has direct impacts not just on transportation but on land use, the environment, economic development, and the County's fiscal capacity to provide other services. In fact, a common criticism of transportation concurrency is that it has failed to meet the land use objectives that the Growth Management Act envisioned.

Chapter 4 summarizes the specific policy components the project team chose for evaluation and draws conclusions based on that evaluation.

[1] The Clark County program for transportation concurrency is described at the end of Chapter 3 of this report.

Chapter 3 Context for the Clark County Evaluation

This chapter provides a context for evaluation by summarizing information about Clark County that relates to transportation concurrency. Most of the data were assembled in Phase II of the project. The evaluation of what this information suggests regarding problems and potential improvements to the County's concurrency program occurred in Phase III of the study and is summarized in Chapter 4.[2]

After a brief overview of Clark County, the more detailed data in this chapter are presented under two broad headings: growth and development, and transportation (including the County's past and current concurrency policies).

OVERVIEW OF CLARK COUNTY

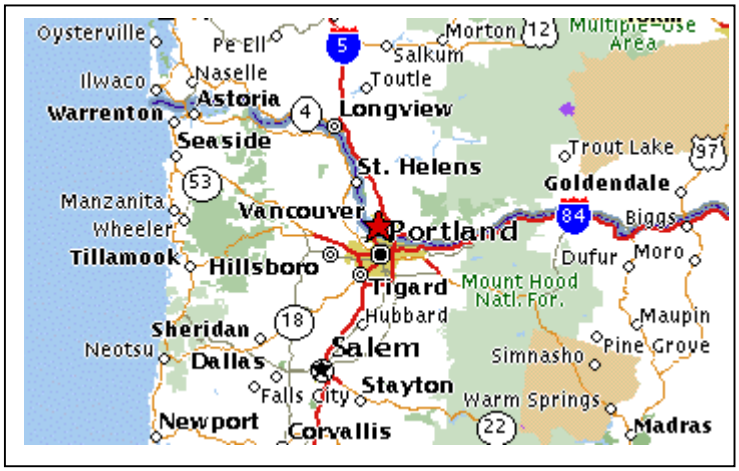
Clark County is a rapidly growing county in Southwest Washington with a population of about 350,000 residents. It is across the Columbia River from Portland, Oregon, and is part of the Portland-Vancouver PMSA, a six-county region with a population of over 1.9 million. Vancouver is by far the largest city in Clark County, with about 42% of the County's population. Almost all the remainder of the County's population is in unincorporated areas, with the exception of some small towns. Figure 3-1 shows the location of Clark County in relation to Portland and the rest of Washington.

Clark County is bisected by Interstate 5, the north-south highway that connects Seattle and Portland to Los Angeles and San Diego, California. Vancouver is also ringed by Interstate 205, which bypasses Portland and Vancouver's downtowns. Clark County's connections west and east are primarily along the Columbia River, which is where most of its population and economic activity is located. It has a marine port on the Columbia River.

Until recently, Vancouver and Clark County has always been a satellite of the much larger Portland and Multnomah County. Its tax advantages and less expensive land made it a good residential location for people with jobs in Oregon; its natural resources (timber) made its development more industrial than commercial. In the 1980s that began to change as the area grew to a size that it could support more services, and high tech firms looked to its available and relatively inexpensive land, with a surrounding labor pool, for expansion.

[2] The collection and review of data in Phase II identified data issues that required some adjustments to the methods, proposed in Phase I, for policy evaluation in Phase III. More information can be found in the Phase II report, particularly Chapter Four.

Figure 3-1: Location of Clark County, Washington



STATE AND LOCAL POLICY CONTEXT

To understand growth, development, and the demands they place on transportation, one must also understand how local and state policy influence development patterns.

The Growth Management Act (GMA), adopted by the Washington State Legislature in 1990 and amended several times since, requires state and local governments to manage Washington's growth by identifying and protecting critical areas and natural resource lands, designating urban growth areas, preparing comprehensive plans, and implementing them through capital investments and development regulations. Rather than centralize planning and decision-making at the state level, the GMA built on Washington's strong traditions of local government control and regional diversity. The GMA established state goals, set deadlines for compliance, offered direction on how to prepare local comprehensive plans and regulations and set forth requirements for early and continuous public participation. Within the framework provided by the mandates of the Act, local governments have many choices regarding the specific content of comprehensive plans and implementing development regulations.

Coordination between counties and the cities within them is a hallmark of the GMA. Counties and the cities within them must jointly designate agricultural lands and critical areas, and they must adopt comprehensive plans that are consistent with one another. As part of the comprehensive planning process, the counties and cities must work together to identify urban growth areas (UGAs). Every city has a UGA that includes the

incorporated city and some adjacent area that is deemed most suitable for accommodating urban growth to meet state-generated population forecasts.

Clark County is currently engaged in other policy efforts beyond this study of transportation concurrency. It has been working since August 2000 on an update of its 20-year Comprehensive Growth Management Plan, and it is also working on an Economic Development Plan and an updated Capital Improvement Program.

GROWTH AND DEVELOPMENT

The performance of the County's transportation system, and the effects of concurrency policy on that performance, occur in a larger context of growth. While transportation system performance can affect growth, in a mature urban area like metropolitan Clark County, where roads are ubiquitous, transportation is rarely a binding constraint on growth. Thus, it is more correct (and more typical for public policy) to estimate some amount of growth in population and development, and then look at the impact of that growth on transportation system performance (rather than to assume some maximum amount of transportation capacity that, when reached, becomes a binding constraint on growth).

Given that assumption, this section summarizes information about growth and development in Clark County: the existing conditions and forecasts for population, employment, and land development that influence the performance of the transportation system.

POPULATION AND EMPLOYMENT

Phase II described population, household, and employment trends and forecasts at several geographic levels: the County, urban growth areas (UGAs), and traffic analysis zones (TAZs).

PAST GROWTH

- Clark County's population has nearly tripled in the past 30 years. This growth has been predominantly in unincorporated areas, which have then been partially annexed by incorporated cities. The growth in incorporated areas from 1990 to 2000 was largely the result of extensive annexations by the City of Vancouver. Vancouver increased its land area from 14.1 square miles in 1990 to 45 square miles in 2000. All the incorporated cities doubled or nearly doubled their population between 1990 and 2000.

Table 3-1. Population in Clark County and Cities, 1970-2001

						Growth (1970-2001)	
	1970	1980	1990	2000	2001 (OFM)	Number	Percent
Clark County	128,454	192,227	238,053	345,238	352,600	224,146	174%
Unincorporated	74,187	135,029	176,743	166,279	170,430	96,243	130%
Incorporated	54,267	57,198	61,310	178,959	182,170	127,903	236%
Battle Ground	1,438	2,774	3,690	9,322	10,040	8,602	598%
Camas	5,790	5,681	6,450	12,534	12,970	7,180	124%
La Center	300	439	483	1,654	1,735	1,435	478%
Ridgefield	1,004	1,092	1,332	2,147	2,175	1,171	117%
Vancouver	41,859	42,834	44,570	143,560	145,300	103,441	247%
Washougal	3,388	3,834	4,240	8,595	8,790	5,402	159%
Woodland (part)				92	95	95	-
Yacolt	488	544	545	1,055	1,065	577	118%

Source: U.S. Census Bureau; 2001 from WA OFM, Pop_2001_final_2.xls

- The number of non-farm jobs in Clark County increased 17% from 1995 to 2000. The biggest growth was in the Transportation, Communication and Utilities sector; in contrast, the Manufacturing sector lost employment. There were over 117,000 non-farm wage and salary jobs in 2000. Services was the biggest employer, followed by Retail Trade, Government, and Manufacturing.

FORECASTED GROWTH

- Population forecasts by the Washington Office of Financial Management (OFM) for the period between 1995 and 2000 were substantially lower than actual growth rates (per the 2000 US Census). OFM's medium forecast underestimated actual growth by more than 6% (about 22,000 persons). Every Clark County jurisdiction exceeded the projected growth rate, except for Ridgefield and Washougal.

11. In 2001 OFM unofficially revised its forecasts to update the 2000 base year to current population levels and to make the previous "high" growth rate the new "medium" growth rate. The Board of County Commissioners recently chose an annual average growth rate of 1.5%, which is between the low and medium revised OFM growth rates. This translates into about 120,000 new County residents between 2000 and 2020.

Table 3-2. Population projections, Clark County, 2000-2020

	2000 pop.	2020 pop.	Pop. Growth 2000-2020	Annual Avg. Growth Rate
1995 OFM Medium	322,755	425,502	102,747	1.4%
1995 OFM High (adopted)	329,783	473,898	144,115	1.8%
2001 OFM Revised Unofficial Medium	346,000	497,202	151,202	1.8%
Adopted by County 2001	346,000	466,000	120,000	1.5%

Source: ECONorthwest, based on County documents

Note: Population based on 2001 County-adopted growth rate is implied by that growth rate

R. Forecasts for traffic analysis zones (TAZ) are the current best-estimates by County planners about where the expected population

and employment growth will occur. The TAZ forecasts, however, have a high level of uncertainty and should be used with caution. It is axiomatic among planners and forecasters that the smaller the area of the forecast, the greater will be the variability between the forecasted growth and the growth that actually occurs.

S. The TAZ forecasts can be grouped into forecasts for each of the urban growth areas (areas including incorporated cities and much of their surrounding area, for purposes of planning under the Growth Management Act).[3] The highest rates of forecasted household and employment growth are in the smaller UGAs in Clark County. The UGAs are larger than the cities they relate to, so the household and employment counts are not comparable to the city figures in Table 3-1.

Table 3-3. Forecast households and employment by UGA, 1999-2025

	Households				Employment			
UGA	1999	2025	Change	Percent Change	1999	2025	Change	Percent Change
Battle Ground	3,903	10,529	6,626	170%	3,691	8,136	4,445	120%
Camas	5,020	17,694	12,674	252%	6,008	13,547	7,539	125%
La Center	842	2,399	1,557	185%	574	1,181	607	106%
Ridgefield	1,160	6,632	5,472	472%	1,398	6,595	5,197	372%
Vancouver	101,996	147,148	45,152	44%	125,832	210,835	85,003	68%
Washougal	4,654	12,829	8,175	176%	3,930	7,553	3,623	92%
Woodland	na	na	-	-	na	na	-	-
Yacolt	na	na	-	-	na	na	-	-
Total	117,575	197,231	79,656	68%	141,433	247,847	106,414	75%
Rural	20,399	28,811	8,412	41%	6,670	16,363	9,693	145%
County Total	137,974	226,042	88,068	64%	148,103	264,210	116,107	78%

Source: ECONorthwest, based on County TAZ forecasts.

LAND DEVELOPMENT

Most development is in the Vancouver UGA, and most developed acreage in Urban Growth Areas is residential. The Vancouver UGA experienced the most building activity from 1995 to 2000, the majority of which was outside the City of Vancouver.

CURRENT LAND USE

T. About two-thirds of the existing residential development (measured by dwelling units) in Clark County is in the Vancouver UGA. The rural

[3] Data are based on County TAZ allocations for 1999 and 2000 aggregated to UGAs. This data has some limitations: the TAZ boundaries do not exactly match the UGA boundaries so the numbers can potentially over- or under-estimate the number of households and jobs in any given UGA. Moreover, County staff recently completed a review of the TAZ allocations as a result of findings from this project and made significant adjustments to some TAZs that better reflect actual development capacity.

part of the County has a significant amount of development––about 17% of the dwelling units.

U. The Vancouver and Battle Ground UGAs are relatively built-out, with less than 10% of their acreage unimproved. Camas, in contrast, has 26% unimproved acreage.

V. Most land in the Urban Growth Areas of Clark County is designated for residential use. Vancouver has the highest share of land designated for residential use (85%), while Camas only has 30% of its acreage in designated residential use (estimates include vacant and developed residential land). Other predominant uses in the UGAs are light and heavy industry (including lumber mills), warehousing, schools, shopping centers, and a mix of commercial uses.

RECENT BUILDING ACTIVITY

W. Building permits issued between 1995 and 2000 account for about 22,285 dwelling units countywide. Of these about 72% were issued for single-family housing types and 28% were issued for multi-family housing types.

X. The Vancouver UGA had by far the most single-family residential development between 1995 and 2000, as measured by building permits: 10,726 single-family units, equal to 65% of the County total for single-family housing for that period. Less than half of those units were within the city of Vancouver. Camas and Battle Ground each had over 1,000 single-family permits during this period as well, and the rural non-UGA part of the County had about 2,500 single-family permits.

Y. There were over 5,000 multi-family units developed in the Vancouver UGA between 1995 and 2000, most of which were in the city of Vancouver (92% of the County total). Only a few hundred multi-family units were developed in the rest of the UGAs. Despite this development, the multi-family share of new residential development was only 28% countywide, short of the 40% goal.

Z. The building permit data were problematic for a variety of reasons, including a lack of valid tax-lot serial numbers, a lack of information on land area or permit value, and missing information on new floor area. Though it is less important for this project because this project focuses on differences between policy alternatives, good land use data are always important as an accurate baseline for transportation modeling.

TRANSPORTATION

Phase II evaluated recent, current, and forecasted transportation system performance for the Countywide system as a whole, and for six selected case

study corridors. These case study corridors were used to evaluate specific policy options in Phase III. Phase II also described key components of the County's past and current concurrency programs. This section summarizes the Phase II analysis of transportation issues.

The transportation system in Clark County is changing in response to growth. The County has directed substantial funding into transportation systems improvements to respond to growth. The County also revised its transportation concurrency program to focus on travel speed in corridors instead of evaluating only delays at intersections. Review of these changes and evaluation of regional travel forecast data suggest that the County will need to deny developments in at least some of the corridors in the future.

IMPROVEMENTS

AA. During the past six to seven years and extending out to about 2005, Clark County has developed or will develop more than 100 transportation projects totaling almost $250 million in expenditures. Private developers have also assisted in implementing nearly 30 additional improvements to help them meet concurrency requirements.

BB. Overall, Clark County has targeted much of its transportation improvements to areas of greatest concern from a concurrency perspective. These include new arterial routes to alleviate congestion on parallel facilities and widening roadways to accommodate traffic growth. The County also has been working with Washington Department of Transportation (WSDOT), Vancouver, and Camas on improvement projects of mutual benefit.

CC. Outside of the urban growth areas, Clark County is investing in relatively few transportation projects. Transportation projects in the rural areas focus on upgrading arterials to standards, installation of traffic signals, and safety enhancements.

DD. As part of its Comprehensive Planning process, Clark County developed a six-year Transportation Improvement Program (TIP). The County's TIP identifies projects for the period between 2001 and 2006 and includes 117 capital projects. The TIP includes cost estimates for 47 of the projects, which total almost $330 million.

EE. Similar to the recent transportation improvement project history, the County's Transportation Improvement Program is heavily focused on the Orchards, Mt. Vista, and Hazel Dell Traffic Impact Fee (TIF) districts, all located in the north part of the Vancouver UGA. Fifty-six% of the 117 projects and over 83% of the obligated or programmed capital expenditures are located in these three districts.

FF. A total of 45 projects are identified for rural parts of the County, outside of the UGAs. Only nine of these projects are obligated or

programmed. Costs for eight of the nine projects are available and total $35 million. This represents just over 10% of the $328 million currently obligated or programmed within the County.

SYSTEM PERFORMANCE

GG. Overall, estimated vehicle-miles of travel (VMT) during the evening (PM) peak hour in the Clark County region grew by almost 20% between 1996 and 1999, based on the Regional Transportation Commission (RTC) model data. The largest percentage growth in VMT between 1996 and 1999 was in the Mt. Vista Traffic Impact Fee (TIF) district, an increase of 33%. The Evergreen, Orchards, and Hazel Dell TIF Districts located in the Vancouver UGA all grew by 20% to 25% over the three-year period.

HH. Countywide, the RTC model shows that vehicle hours of travel (VHT) grew by 23% between 1996 and 1999.[4] The increase in VHT is slightly more than the 19% increase in VMT. This suggests that overall travel speeds are getting slower due to increased congestion.

II. From 1999 to 2020, total VMT within the County is forecast to increase by more than 50%. The 2020 values assume completion of the Metropolitan Transportation Plan. This represents a 2% annual compound growth rate. The RTC model data show VMT in the outlying UGAs (Camas, Washougal, Ridgefield, Battle Ground) increasing at the highest rates. The largely unincorporated parts of the Vancouver UGA (i.e. Hazel Dell, Orchards, and Mt. Vista TIF districts) show a 45 to 55% increase in VMT between 1999 and 2020.

JJ. Even with completion of longer-range improvement projects by 2020, VHT in the region will increase at a significantly faster rate than VMT. Regional VHT is forecast to be 85% higher in 2020 than 1999. This is almost 3% per year, significantly higher than the growth in VMT.

KK. Within the County TIF districts such as Orchards, Mt. Vista, and Hazel Dell, VHT is forecast to grow only slightly faster than VMT through 2020. This reflects the significant addition of arterial capacity planned for these areas, as previously described.

BASE CONDITIONS FOR STUDY CORRIDORS

LL. Case study corridors were selected from the existing transportation concurrency corridors based on a range of criteria. The criteria

[4] Vehicle hours of travel (VHT) provides a broad view of changes in congestion levels on a network. If VHT grows at a faster rate than VMT, then congestion is likely getting worse. If VHT grows at a similar or lower rate than VMT, then the transportation system is generally seen as having adequate capacity to accommodate the traffic. Lower VHT also could reflect the addition of new capacity within an area.

included level of service standards, planned improvements, availability of traffic data, land uses, and location. The six corridors were:

MM. Hazel Dell Avenue (NE 63rd Street to Highway 99)

NN. Highway 99 (NE 63rd Street to NE 99th Street)

OO. NE 134th/ Salmon Creek Avenue (I-205 to NE 50th Avenue)

PP. NE 72nd Avenue (NE 119th Street to SR 502)

QQ. NE Covington Road (SR 500 to Padden Parkway)

12. SR 503 (SR 500 to NE 119th Street)

- The reasons for each corridor's selection were:

RR. The NE Hazel Dell Avenue corridor was chosen because of its designation as an urban connector that serves a variety of land uses including single-family, multi-family, and commercial land uses. Also, the Operating Level Corridor Speed is approaching the corridor's Travel Speed Standard in the northbound direction. Traffic count data is available for the corridor.

SS. The Highway 99 corridor was chosen because of its high level of commercial use and because the operating speeds are approaching the speed standards. A good selection of traffic data is also available.

TT. The Salmon Creek Avenue corridor was chosen because it serves a wide range and type of travel patterns and has the lowest travel speed standard (i.e. allows the highest level of congestion). It is a four-lane highway with a center turn lane and has a low level of access management.

UU. The NE 72nd Avenue corridor was chosen because of its designation as a rural connector. It also has one of the highest travel speed standards.

VV. The Gher/Covington corridor was chosen because of the varied commercial and retail land uses. Both directions of the corridor are close to failure.

- SR-503 was chosen because it is a state route.

- The six case study corridors provide a good cross section of conditions for testing various concurrency concepts.

WW. The Traffix software package used by the County in conducting concurrency tests for individual developments is not linked to the

regional RTC travel demand model (emme/2 software) which was used to set the travel speed standards for the corridors.

XX. A range of transportation improvements (both public and private) has been or will be completed in many of the case study corridors.

YY. Travel speeds for four (Hazel Dell Avenue, Covington Road, NE 134th Street/Salmon Creek Avenue, and Highway 99) of the case study corridors are estimated to be within 3 mph of the travel speed standard.

ZZ. In some of the corridors the travel speed is largely controlled by delays at a few intersections. For example, the delays in the NE134th Street /Salmon Creek Avenue corridor is primarily on the approaches to the freeway interchange ramp intersections.

CONCURRENCY PROGRAM

- Clark County implemented its first Transportation Concurrency Management system in 1994 to meet state concurrency requirements. The 1994 program was based on intersection operations.

- The County did not specifically track projects that would have failed transportation concurrency and that therefore did not occur. In many cases, developers would find out what projects would need to occur for approval and would pursue voluntary mitigation before an application for concurrency approval was made. In other cases, developments simply went away or were changed in scope to avoid concurrency issues. Since there are no formal records of these developments, it is difficult to ascertain how much development was limited by the concurrency requirement

- In October 2000, the County revised the program to be more corridor based, instead of solely based on intersections. This new concurrency system established level of service standards for 34 Concurrency Corridors and procedures to ensure those standards are met before new developments are approved.

- The County's concurrency testing program involves a three-step approach. The first step is a requirement to meet minimum travel speed standards for the 34 designated concurrency corridors. The second part sets a level of service standard for signalized intersections within those concurrency corridors. The third part relates to unsignalized intersections.

- The availability of transit, sidewalks, bike lanes, or other travel modes is not taken into account in the concurrency evaluation.

AAA. The current County practice for evaluating transportation concurrency does not accurately reflect all of the major improvements that are to be in place in the next three years.

BBB. There are a variety of other issues with the County's current concurrency policy that are described within the context of the policy alternative evaluation in Chapter 4.

Chapter 4 Policy Evaluation

This chapter summarizes the evaluation of policy alternatives that could deal with the various components of concurrency in ways that would help Clark County achieve the outcomes it wants from its growth management concurrency ordinance.

This chapter first describes the evaluation methods, including how policy issues and alternatives were identified. It then describes findings in two groups: overarching conclusions that might be useful to any jurisdiction dealing with concurrency, and specific options for Clark County.

METHOD OF EVALUATION

IDENTIFYING THE POLICY ISSUES

Chapter 2 provides an overview of the key components of concurrency policy––that is, policy levers that could change the outcome of concurrency policy. Before the project team decided which components to adjust, it had to decide what the important issues were that were related to and potentially affected by these policy components.

To do so, the project team relied on its extensive experience with concurrency programs, and a careful review of several resource documents prepared for this study. The team also reviewed the "Discussion Papers" prepared by County staff for the Board of County Commissioners in January and April of 2000, which evaluated policy options for Clark County's updated concurrency ordinance. The project team reviewed the four "outcomes" of concurrency that were presented to the Board of County Commissioners on May 9, 2001: stop or slow, shape, accommodate, or stimulate growth; and it reviewed the summary of the Commissioners' discussion.

Based on this review and analysis, the universe of issues and alternatives was reduced to twelve issues (each with one or more corresponding policy alternatives) that have the most promise for effecting change in Clark County's transportation and land use in ways that are consistent with the

County's goals and policies. Trivial or cosmetic changes to concurrency policy were not included.

Not every policy component identified in Chapter 2 became one for which a policy alternative was evaluated; the project team decided that not every policy component was sufficiently important for Clark County. Likewise, there are some policy components from Chapter 2 for which more than one policy alternative was identified, in order to deal with important policy sub-components.

ORGANIZATION OF ALTERNATIVES

The twelve policy issues and their corresponding policy alternatives were organized in two groups:

- **Narrow, technical improvements to existing concurrency policy.** These alternatives are based on the assumption that the concurrency program is generally doing the right things, but that certain technical changes could improve its efficiency or fairness.

- **Broad policy changes.** These alternatives are based on the assumption that the County has broader policy objectives (for land use, economic development, or quality of life) that it can achieve more effectively if the concurrency program is used as a tool for proactively achieving those objectives.

Following are two tables that summarize the policy alternatives that were evaluated.

Table 4-1. Narrow policy issues for concurrency

Subject	Current Policy	Potential Change(s)
1. Concurrency Test Area	1, 2, and 3 mile radius	Traffic shed unique to each corridor (dimensional change) Traffic shed replaces traffic study (systemic change)
2. Corridor Speed and Intersection Delay Standards	Specific speeds for each corridor plus limit on delay at intersections	Adjust to improve outcomes consistent with land use plan
3. Modeling for Background Traffic Shifts	Not currently modeled	Test for changes in concurrency due to major capacity projects
4. Through Traffic	Addressed through application of uniform growth rates	Identify through traffic growth rates through modeling No change (1% per year for all corridors)
5. Time Available to Achieve Concurrency	3 years to complete improvements	6 years 1 year No change (3 years)
6. Constrained Facilities	No policy	Define and identify constrained facilities
7. Mitigation Strategies	Developers propose mitigations that are consistent with County plans	Create mitigation by development that is linked to concurrency
8. Fees for Concurrency	No fee	Administrative fee
9. Modes of Travel	Cars and trucks on roads	Adjust corridor speeds and intersection delays where transit is available Reduce trip rate from transit supportive development Exemptions No change

Table 4-2. Broad policy issues for concurrency

Subject	Current Policy	Potential Change(s)
10. Multi-modal Concurrency	Cars and trucks on roads	Levels of service for transit and non-motorized travel
11. Allocation of Capacity	Market forces; first come, first served	Allocate capacity to specific types of development Allocate capacity to specific corridors
12. Investment Priorities	Multiple factors, diverse investments	Target locations Target modes Target types of development

EVALUATION FORMAT

For each policy alternative, the project team explored the following:

- What the key policy issue is that is being addressed.
- How Clark County's present concurrency policy addresses that issue.
- Alternative ways to address the issue.
- Evaluation of the alternatives, based in part on transportation modeling.
- Conclusions.

The details of this evaluation are found in the Phase III report and are not repeated here. The next section focuses instead on overarching conclusions and on potential policy packages that are best suited for meeting Clark County's transportation and development goals.

FINDINGS

The project team evaluated a wide range of potential changes to Clark County's program for transportation concurrency. There are dozens of possible combinations of changes. How can the County use the information from this study to make decisions on changes? This section addresses that question by drawing conclusions from the study.

The conclusions are of two types (general, and specific to Clark County), and are reported in two separate sections:

- **Conclusions about concurrency in general**. The project team evaluated in detail a dozen different ways concurrency policy could be adjusted. This section takes a step back from those details to see what they say about the broader picture. There are some conclusions about

concurrency that are true no matter which other goals the County ultimately decides to pursue. They are also true independent of Clark County's specific implementation of transportation concurrency, which means that they are applicable to other jurisdictions in Washington and in other states.

- **Conclusions about potential changes to Clark County's transportation concurrency policies**. There are packages of policy changes that tend to group together depending on the County's decisions about its directions for growth (land use and economic development).

CONCLUSIONS ABOUT CONCURRENCY IN GENERAL

CONCLUSION ONE: IN MOST CASES, THE CURRENT LEVEL OF TRANSPORTATION SERVICE CANNOT BE MAINTAINED IN ALL PARTS OF A GROWING URBAN AREA OVER THE LONG RUN.

When cities grow, they get denser. Spatial concentration is part of the definition of urban areas. There are economic advantages to concentration. Businesses that see those advantages compete for central locations. In doing so, they bid up land prices, which encourages density (the substitution of capital improvements for land). High land and improvement prices make it more expensive to use land for transportation systems. People and trips grow faster than streets. Despite technological improvements (transportation system management, like smart traffic lights), congestion eventually gets worse (the level of service decreases).

There may be some exceptions for some cities, or for some subareas, or for some relatively short period of time. But absent changes in the pricing of road capacity (e.g., congestion pricing), one should expect increasing congestion and decreasing levels of service in the central area of large cities. Concurrency policy can tell the problem to go away, but it won't.

CONCLUSION TWO: CONCURRENCY SHOULD BE A MEANS OF ACHIEVING GOALS FOR GROWTH AND DEVELOPMENT, NOT AN END IN ITSELF.

Concurrency is a means of achieving other goals related primarily to transportation system performance: a jurisdiction adopts concurrency primarily because it hopes that such policies will provide better transportation performance in the future than the jurisdiction would have without concurrency. Though this point is obvious, it can get obscured when local governments are compelled by state policy to implement transportation concurrency policies that they do not necessarily support. In those case concurrency can become an end in itself ("We are doing it to meet state requirements"), and its effects on system performance may be minimal.

Why would a local government not be wholeheartedly in favor of transportation concurrency and the improvements in future system performance that it promises? Because, like everything local government does

in the arena of development and growth management, there are tradeoffs. Maintaining a specific level of standard (LOS) in the face of urban growth means either putting a lot of resources into transportation infrastructure, or getting travelers to behave in ways that are substantially different from what has been observed over the last fifty years in most cities. For example, travelers would need to use transit more frequently, take shorter trips, or take fewer trips. Cities must balance transportation needs with other objectives for land use, economic development, other public services, fiscal stability, and quality of life. Concurrency policies clearly can affect cities' ability to achieve their goals in these other areas.

The implication of this conclusion is that a local government should, when implementing a policy for transportation concurrency, look at other public goals simultaneously. It cannot make good decisions about transportation concurrency without knowledge of goals for other policy areas. In that sense, transportation concurrency is a tool that serves broader policy objectives than those of transportation alone.

CONCLUSION THREE: CONCURRENCY CAN BE ADJUSTED TO ACHIEVE DIFFERENT GOALS FOR TRANSPORTATION, LAND USE, AND ECONOMIC DEVELOPMENT.

This conclusion expands on the previous one. Phase I of this project defined four points on a continuum of desired outcomes for growth and economic development. These outcomes can be thought of as the joint, overarching goal for transportation, land use, public facility, and economic development policies. The four growth and development outcomes, arranged roughly along the continuum from no-growth to go-growth, are: stop or slow growth, shape growth, accommodate growth, or stimulate growth.

Following are working definitions of each of the four outcomes, including a synopsis of how each outcome addresses traffic congestion, development patterns, planned transportation improvements, and the mix of travel modes.

- **Stop or slow growth.** Limit the type and amount of growth by geographic location.

  Traffic Congestion: Existing congestion levels are maintained or increased in all corridors until development is stopped by concurrency.

  Development Patterns: Development is allowed only in areas served by corridors with capacity for additional traffic. Impact fees are probably high.

  Planned Transportation Improvements: Strict concurrency and limited resources leave arterial capacity deficiencies that restrict additional growth.

  Mode Mix: There is little or no change of existing levels of mode

choice, and no incentive to alter travel modes.

- **Shape growth.** Define the type and amount of growth desired by geographic location; facilitate development that meets the definition; reject or offer no assistance to development that does not.

  Traffic Congestion: Existing congestion levels are maintained or increased in selected corridors, and alleviated in other corridors based on where the County wants development to occur.

  Development Patterns: Development is allowed only in areas targeted for growth by the County. Density options may be available to encourage modal mix.

  Planned Transportation Improvements: Transportation improvements are focused in areas that are targeted for growth.

  Mode Mix: Increased emphasis on transit and bike/ped in order to accommodate higher density /mixed land uses.

- **Accommodate growth.** Allow the market to determine the type and amount of growth by geographic location. May imply providing adequate public facilities (including transportation capacity) to allow development to occur at forecasted or historical rates.

  Traffic Congestion: Congestion levels increase in all corridors.

  Development Patterns: Development patterns are consistent with the Comprehensive Plan's land use designations.

  Planned Transportation Improvements: There is less pressure on the County to address capacity problems because of lower level-of-service thresholds.

  Mode Mix: Emphasis is on single occupancy vehicles because they have the cheapest cost per person trip in the near term.

- **Stimulate growth.** Encourage growth of any type, anywhere in the community, at a rate that may be higher than that which would be realized through market forces alone.

  Traffic Congestion: There is a significant increase in congestion in all corridors.

  Development Patterns: Land uses are spread out seeking low-priced land. Commercial and industrial land uses are less concentrated.

  Planned Transportation Improvements: There is less pressure on the County to address capacity problems because of lower level-of service thresholds. The County focuses transportation investments

to support recruited development.

Mode Mix: Emphasis is on single-occupancy vehicles to access spread-out land use pattern, except in areas with sufficient density where transit is more heavily used.

A local government's concurrency system does not have to select only one of the four approaches: it could use different approaches in different locations or at different times over the planning horizon.

The point is not that one of these outcomes should be preferred in an absolute sense: those are local decisions, and they change with circumstances. The main point, rather (and again), is that transportation concurrency policies should be adopted in the context of these larger desired outcomes for economic development. It makes little sense, for example, to have simultaneously a short run goal of stimulating economic development and a strict transportation concurrency policy that requires current level of service to be maintained by transportation projects that must be built within one year of new land development.

CONCLUSION FOUR: TRANSPORTATION CONCURRENCY POLICIES CAN AFFECT GROWTH. LEVEL-OF-SERVICE STANDARDS ARE VARIABLE; THEY CAN BE SET LOW TO ACCOMMODATE GROWTH, OR SET HIGH TO SHAPE IT.

The previous conclusions argued that transportation concurrency policy can, in theory, affect land use. This point is more specific about why that is true.

At the core of all transportation concurrency policies is some statement about an acceptable level of service. That standard can be measured in a number of ways (e.g., average travel speed, intersection delay). It can also be set at any level (in Washington, the state requirement for concurrency allows local governments to set the standard). A very strict concurrency policy might say, effectively, "No new development unless new transportation facilities or programs are added that will keep the level of service where it is today." Such a policy could be, effectively, a moratorium on development in many jurisdictions.[5] At the other extreme, a local government could set its standard at what it expects the level of service will be after 20 years of growth, and could then readjust (down) the standard every five years based on a new 20-year forecast. In that case, the standard would rarely bind,[6] and the concurrency policy would be essentially irrelevant.

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[5] The state GMA requires that each jurisdiction accommodate its share of forecast growth and that land use, transportation LOS, and financing be in balance. Thus, a moratorium is not a long-run solution.

[6] "Rarely" because even with a 20-year threshold, the failure to build key facilities that were assumed in the 20-year forecast in a timely manner could lead to a failure to meet standards for some shorter term horizon less than 20 years. That point is discussed further below.

CONCLUSION FIVE: CONCURRENCY'S IMPACTS ON GROWTH IN THE SHORT RUN MAY BE DIFFERENT IN THE LONG RUN.

A preliminary evaluation of transportation concurrency would support the conclusion that if a local government's objectives were to stimulate growth, then it would want a very liberal (perhaps ineffective) transportation concurrency policy. The policy would be one that did not stop current development because of the inability of either the public or private sectors to fund and build transportation facilities that would maintain level of service.

But the long-run story for economic development could, in theory, be quite different. If short-run growth occurs without any new transportation capacity, level of service gets worse and worse, faster and faster. Eventually it becomes so bad that trucks cannot make timely deliveries, and commuters look for employment in other locations. If transportation level of service is ignored to allow short-run economic development, the risk is that the economic engine stalls in the long run.

There is no formula. Each jurisdiction must make choices about tradeoffs. Will it forestall some economic development now so that it can get transportation and other public facility funding and construction in place for future economic development?

CONCLUSION SIX: TIMING MATTERS. LEVEL-OF-SERVICE STANDARDS DEVELOPED FROM ANALYSIS OF TWENTY-YEAR PLAN ARE NOT ACHIEVABLE WITH SIX-YEAR TIP AND THREE-YEAR CONCURRENCY.

Clark County's standards for levels of service were established based on modeling of the impact of long-range (20-year) growth on a network with long-range improvements. It is possible for development that is anticipated in 20 years to occur during the first few years of the planning horizon, and well in advance of transportation improvements that are planned for years 7 through 20. In that case, it is possible[7] that only three to five years out, a test of the concurrency corridor would find that travel times have fallen below the standard (which was set to accommodate 20-years of growth).

There are several ways for a jurisdiction to deal with this situation of early corridor failures. Here are some possibilities, using Clark County as an example:

13. **Do nothing.** In this case, the concurrency requirement provides late warning of imminent problems, and requires immediate action, including moratoria, until development can be served by transportation facilities that meet standards. One interpretation of concurrency is that it is supposed to cause development to be denied, delayed, or revised if it

[7] Not just in theory: it appears that the County's problems in the Salmon Creek area are primarily a result of early growth without the transportation improvements that were programmed for later.

would cause transportation to function below local standards for levels of service.

14. **Change plan horizons.** Clark County, could use its existing concurrency methodology (travel time in corridors plus limited delays at intersections) but model the results for a six-year period (rather than 20 years), and revise the standards to correspond to the outcomes that can be achieved in six years. These standards would need to be reviewed annually to update the funding status of transportation improvements to be provided by County, state, or other agencies.

15. **Establish an intermediate warning system.** The County's present approach to concurrency stops development if LOS standards would be violated, but there is relatively short notice that this is about to occur. The County could prepare annual analyses of expected growth and expected traffic volumes and use the results to classify traffic analysis zones (or corridors) based on expected levels of service. An example of a classification system is the use of "green/yellow/red" color codes. In that example, green designates areas with forecast travel speeds that are at least 10% faster than the standard, yellow is for areas above but within 10% of the standards, and red indicates areas that are below standards. The yellow would serve as an alarm bell to alert the County to the need for action to maintain the balance between development and transportation. Red areas are moratorium areas, and presumably are being worked on since the time they first became yellow areas. This type of three-tiered system could mitigate the development problems caused by the immediate imposition of a moratorium.

CONCLUSION SEVEN: CONCURRENCY REQUIRES ESTABLISHING THRESHOLDS, WITH THE RESULT THAT SOME PROPERTIES CLOSE TO ONE ANOTHER WILL BE TREATED DIFFERENTLY.

No model exists that can quickly and with adequate reliability forecast the effect of a given development on every arterial and collector in a jurisdiction, now and in the future. Simplifications have to be made.

One typical simplification is to limit the geographic scope of the impact analysis. Clark County, for example, tests transportation impacts of a development within a one-, two-, or three-mile radius of the tested transportation corridor, depending on development type and size (which are defined to correlate with the expected scale of transportation impacts).

Those boundaries—any boundaries—create an unavoidable problem. Otherwise identical and contiguous properties on opposite sides of the boundaries get treated differently. At the extreme, one cannot develop, while the other one can. This situation can create the undesirable effect of encouraging the decentralization of development to areas that are farther than three miles from a tested corridor.

But since concurrency is not going to be applied County-wide, there will be boundaries in any concurrency program. Furthermore, since more of the parcels in a concurrency test area will be inside the area than will be on its border, relatively few properties will be affected in the way that is described above. The threshold problem is raised here neither as a fatal flaw or as a problem that can be solved with the proper analysis or implementation. Rather, it is raised as a caution: pay attention to boundary and threshold issues when setting policy so that the worst of the problems described here are avoided.

CONCLUSION EIGHT: CONCURRENCY POLICY (MAINTAINING LEVEL OF SERVICE ON CORRIDORS) MAY CONFLICT WITH THE NECESSITY OF PROVIDING SAFE ACCESS TO THE CORRIDORS.

Providing safe access is a common focus of traditional mitigation policy. That policy can, however, conflict with objectives for transportation concurrency. One policy is trying to get better (and probably more) access to the main arterial or collector in the corridor being tested. Access and safety are improved from crossing streets if they get a signal, and if they get more signal time. But those signals and more signal time would slow down the traffic on the main corridor; therefore, the level of service would decrease.

This apparent conflict could be resolved by new mitigation techniques. Although mitigation in Washington currently includes mitigating capacity impacts at the point of access and nearby roads and intersections (based on SEPA legislation), the new mitigation authorized by the Growth Management Act could be used to obtain mitigation of system improvements (i.e., corridors) that are the basis for the concurrency system. In other words, mitigation through impact fees for system improvements could potentially offset the loss of LOS through additional access.

On the other hand, not all jurisdictions choose to enact impact fees, and some that do set them at a lower level for policy reasons other than transportation system performance. The balance between access and corridor traffic flow is an important issue to be considered in transportation concurrency policy and other policies like impact fee decisions.

CONCLUSION NINE: LOCAL CONCURRENCY POLICIES HAVE LITTLE CONTROL OVER TWO FACTORS THAT HAVE A BIG IMPACT ON THEIR ROADS: STATE HIGHWAYS AND THROUGH TRAFFIC.

State Highways

In Washington, State highways of statewide significance have no concurrency requirement. State highways of regional significance will be subject to local concurrency ordinances, but these facilities have not yet been identified, and the standards to be used for concurrency are to be established jointly by the local government and the state through the regional planning process.

State and local governments are both affected by drivers' use of the "other" government's roads. Some trips that could be carried by state roads and freeways are shifting to county roads and city streets to find a shorter travel time; in doing so they are consuming capacity that would otherwise be available to serve local land uses. Conversely, some local trips that could be carried by local streets are occurring on state facilities that were designed for through traffic.

Communities are obliged to overcome a transportation deficit caused by decades of rapid growth and underfunding, particularly on state roads. Complicating the issue is the tendency of local governments to approve development that accesses state facilities. State agencies tend to set high standards for their facilities in order to protect them, but local governments tend to set lower standards for the same facilities in order to develop local economies and expand their tax bases, as well as to accommodate mandated growth goals.

Clark County's policy is to test regionally significant state highways as part of concurrency, but the identification of facilities and their level of service standards is not yet complete. In the event the process is unsuccessful, the County's policy should be that if the state provides funding to achieve its standards in a timely manner, state standards apply to concurrency. If the state does not provide funding to achieve its standards in a timely manner, the County should set the standards for concurrency.

Through Traffic

Travel crosses jurisdictional boundaries, so development in one jurisdiction usually generates travel on roads in other jurisdictions.

A recent survey of concurrency in 68 Washington counties and cities in the central Puget Sound found that 16% of these jurisdictions coordinate the standards, modeling or measurement methods for concurrency, and 26% try to account for development outside their jurisdiction. Only 13% jointly provide facilities, and 10% share funding. In other words, most local governments are not directly addressing the impacts of traffic generated by their neighbors, nor are they coordinating the impact of their own development approvals on neighboring jurisdictions.

There are several aspects of a local government's concurrency program that can be affected by development decisions in other jurisdictions:

- Differences in methods for calculating level of service make it difficult for jurisdictions to compare impacts of land use decisions on each other's levels of service, and it becomes virtually impossible to coordinate or collaborate on concurrency outcomes.

- Information about transportation impacts of development approved by adjacent jurisdictions is essential to successful coordination among jurisdictions. Without such information, the best that can be expected

is uninformed decisionmaking, and the worst is balkanization and conflict among jurisdictions.

- Reserving and reporting capacity commitments is important to avoid committing too much capacity for local traffic and failing to account adequately for traffic from other jurisdictions.

- Mitigating impacts in other jurisdictions can be a way to reinforce concurrency levels of service.

CONCLUSION TEN: ALL OF THE POSSIBLE CHANGES TO CONCURRENCY POLICY DESCRIBED IN THIS REPORT ARE PROBABLY LEGAL IN WASHINGTON.

Washington's transportation concurrency requirements give a lot of latitude to local governments. Most fundamentally, local governments have the authority to define their own standards for level of service—as explained above, that means they can set them (at the extremes) to either stop development now or never have an effect on development. Other things that affect the impacts of concurrency that a local jurisdiction can legally affect are the number and size of the concurrency test areas, or the time period over which concurrency is tested.

The only concurrency policy alternative that may have some legal questions is allocation of capacity to specific types of development. Can the County approve some development while denying other types of development? There are several reasons to believe that capacity allocation is a lawful exercise of government authority.

Governments already limit development in many ways, including zoning, height and setbacks, potable water, disposal of sanitary wastes, and environmental impacts. Each of these limitations causes some proposed development to be approved while others are not.

Some local governments have allocated building permits. Two examples are Boulder, Colorado and Petaluma, California. Other local governments allocate capacity of water and/or sewer systems. The City of Vancouver allocates transportation capacity through its concurrency system.

Washington's concurrency statute requires local governments to deny development applications that would cause transportation levels of service to be below adopted standards. The legislature specifically authorizes (and requires) local governments to deny development applications under specific circumstances relating to transportation. This requires governments to approve development under some circumstances while denying it under other circumstances.

Governments have limited resources to use to provide transportation capacity. Governments are not required to raise money for transportation, and many laws restrict their ability to raise money for transportation. The result is that governments are often faced with inadequate transportation

systems and without the authority to raise sufficient money to fix them. There is no law that requires government to approve development that would be served by inadequate transportation, and the concurrency law requires the opposite (denial of development if transportation is inadequate). The outcome is that government approves development under some circumstances while denying it under other circumstances.

When governments do have money for transportation, they are given wide latitude in when, where, and how to spend money to improve transportation. They are not required to spend money in ways that fix all capacity problems, nor even a specific capacity problem. As a result, they may have parts of their transportation system that are inadequate for new development, thus requiring the government to deny applications for new development.

CONCLUSIONS ABOUT POTENTIAL CHANGES TO CLARK COUNTY'S TRANSPORTATION CONCURRENCY POLICIES

The conclusions in the previous section apply to any transportation concurrency program. They provide a context for this section's more detailed evaluation of Clark County's programs, and options for change.

Meetings of consultants, Clark County staff, and Clark County Commissioners during the course of this project led to the conclusion that thinking of transportation concurrency in the context of the County's goals for growth and economic development (slow, shape, accommodate, stimulate) made sense. Table 4-3 summarizes how the different components of concurrency policy might be adjusted to achieve or be consistent with whichever of those development goals that the County might pursue, either County-wide or for subareas.

Table 4-3 shows that all of the policy components can be used to affect growth in some way. Some of the policies, like standards for intersection delay and corridor speeds, have a very direct effect on the *amount* of development that occurs, while others, like modes of travel and investment priorities, more affect the *location* and *type* of development.

Table 4-3. Development goals and concurrency policies

Concurrency Policy	Stop or Slow	Shape	Accommodate	Stimulate
1. Concurrency Test Area	♦ Large traffic sheds that capture virtually every trip to every corridor ♦ Require traffic studies for all development	♦ Mix of large and small traffic sheds tailored to desired development patterns ♦ Green and red zones tailored to desired development patterns	♦ Green/yellow/red zones that provide predictability	♦ Tightly drawn traffic sheds that evaluate only the largest development impacts ♦ Green/yellow/red zones that provide predictability
2. Corridor Speed and Intersection Delay Standards	♦ Higher speed LOS makes moratorium more likely	♦ Higher speed standards to restrict low priority development, lower speed standards to encourage high priority development	♦ Adjust standards if resources in sufficient to provide capacity to avoid moratorium	♦ Lower speed LOS allows development ♦ Higher speed LOS attracts development
3. Modeling for Background Traffic Shifts	♦ Test for changes for every development proposal	♦ Not useful	♦ Current policy or annual test for changes due to major capacity projects	♦ No provision for background traffic
4. Through Traffic	♦ Identify through traffic growth rates through modeling	♦ Not useful	♦ No change (1% per year for all corridors)	♦ No change (1% per year for all corridors)
5. Time Available to Achieve Concurrency	♦ 1 years	♦ Not useful	♦ 3 years (no change to existing policy)	♦ 6 years
6. Constrained Facilities	♦ Do not alter standards for constrained facilities (do not use this policy)	♦ Define and identify constrained facilities where development is desirable	♦ Not useful	♦ Define and identify constrained facilities

Concurrency Policy	Stop or Slow	Shape	Accommodate	Stimulate
7. Mitigation Strategies	♦ Do not allow mitigation	♦ Require mitigation through SEPA in addition to impact fees	♦ Create mitigation by development that is linked to concurrency	♦ Pay and go mitigation through impact fees
8. Fees for Concurrency	♦ Administrative fee not useful strategy	♦ Administrative fee to recover costs	♦ No administrative fee	♦ No administrative fee, or waiver for job-creating development
9. Modes of Travel (narrow)	♦ Increase corridor speed and intersection delay standards where transit is not available	♦ Reduce corridor speed and intersection delay standards where transit is available ♦ Reduce trip rate from transit supportive development	♦ No change	♦ Reduce trip rate from transit supportive development
10. Modes of Travel (broad)	♦ High level of service standards for transit and non-motorized travel may limit development	♦ Levels of service for transit can encourage transit oriented development	♦ Not useful	♦ Useful if standards help provide transportation for job-creating development
11. Allocation of Capacity	♦ Zero or very low allocation limits development	♦ Allocate to job-creating development in desired locations ♦ Limited allocation for residential in specific locations	♦ Not useful	♦ Allocate all capacity to job-creating development to stimulate economic development
12. Investment Priorities	♦ Low or no investment restricts capacity, limits potential development	♦ Invest in job-creating development in appropriate locations	♦ Not useful	♦ High investment provides capacity that attracts development

It is the opinion of the consultants that at the time this report is being written (May 2002) the County will be in the best position to make decisions on transportation concurrency within the next 12-18 months, as soon as it completes studies for land use, public facilities, and economic development. These studies will include important updates of information on past trends, existing conditions, and likely future conditions, and they will be working from similar updated assumptions about buildable land and about population and employment forecasts. To some extent the results of this study may also influence the County's decision about what its land use, economic development and transportation priority/funding program should be. In other words, having good information about implementation tools (their potential effectiveness and likely costs) should influence the future chosen.

Thus, the recommendation here is that the County review this report as it makes decisions about the type, amount, and location of development it wants to see in the County, and that it *return to this report* when it has made those decisions. The County can then adjust its transportation concurrency policies to support those decisions. To assist the County with that task, the next sections provide two packages of policy adjustments: one consistent with the idea of shaping or stimulating growth, and one with the idea of slowing or accommodating growth.

CHANGES TO CONCURRENCY POLICIES CONSISTENT WITH A COUNTY DECISION TO TRY TO SHAPE OR STIMULATE JOB GROWTH

Clark County can use the concurrency policy alternatives described in this study to help the County achieve its goals and objectives. As an example, Table 4-4 lists specific concurrency policies the County could use to support the development of family wage jobs.

The policy alternatives in Table 4-4 stimulate growth by lowering requirements of and restrictions on job-creating development. In some cases, the government may, instead of or in addition to lowering the regulatory burden, actively invest resources to create the transportation capacity that supports job-creating development. Most of these policies can be targeted so that they apply only, or in added increments, to job-creating development that is of a desired type or in a desired location.

Table 4-4. Concurrency policies for job creation

New Concurrency Policy	Strategy to Stimulate or Shape Development of Family Wage Jobs
Investment Priorities	Make high investment in the type and location of transportation capacity that attracts and serves development of family wage jobs. The investments maintain or even increase levels of service, avoid deficiencies, and provide support for movement of freight, goods, employees, and customers that attract job-creating development.
Mitigation Strategies	Eliminate or substantially reduce mitigation requirements by using public investment to pay most or all of needed transportation capacity. Any mitigation that is required is in the form of predictable impact fees that enable development to "pay and go" without separate analysis of impact on system level transportation network.
Concurrency Test Areas	Draw traffic sheds tightly around buildable industrial and office land to exclude residential development. Traffic sheds are designated green, yellow, or red around buildable industrial and office land to indicate whether future development will cause concurrency LOS problems within a short term horizon. Green areas identify buildable industrial and office land that is immediately developable. Yellow or red areas indicate land that is not immediately developable.
Standards for Corridor Speed and /or Intersection Delay	Alternative 1: Reduce speed standards and/or increase allowable intersection delays in specific locations in order to allow family wage job development without substantial mitigation or public investment. Lowering standards in the short-term may, however, create congestion that imperils long-term growth. Alternative 2: Increase achievable speeds and/or reduce intersection delays through public investments in specific locations in order to attract development of family wage jobs.
Allocation of Transportation Capacity	Alternative 1: Allocate large portion of transportation capacity to job-creating development in specific locations, and allocate little or none to residential development in those same areas. Alternative 2: Reserve some capacity for job-creating development in specific locations so that residential development does not use up all the capacity in those same areas.

CHANGES TO CONCURRENCY POLICIES CONSISTENT WITH A COUNTY DECISION TO TRY TO STOP OR SLOW GROWTH

Table 4-5 lists specific concurrency policies the County could use to slow or stop development in specific locations, and/or specific types of development.

The policy alternatives in Table 4-5 slow or stop development by increasing the requirements of and restrictions on development. Most of these policies can be

targeted to apply only, or in added increments, to development of certain types or in certain locations.

Table 4-5. Concurrency policies to stop or slow growth

New Concurrency Policy	Strategy to Slow or Stop Development
Standards for Corridor Speed and /or Intersection Delay	Increase speed standards and/or reduce allowable intersection delays in order to reduce the amount of development that can be accommodated while maintaining the standards.
Concurrency Test Areas	Draw traffic sheds widely to ensure that all impacts of development are considered before more development is allowed.
Investment Priorities	Minimize investment in transportation capacity that would attract and serve development.
Mitigation Strategies	Require full mitigation of impacts by new development.
Allocation of Transportation Capacity	Allocate all transportation capacity and meter it in increments that spread development over the entire 20 year planning horizon.